

Application No.: 10/077,851**Docket No.: 30007317-2 US (1509-280)****AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. **(currently amended)** A method of exchanging a digital credential between a first computer node and a second computer node, the method comprising
establishing a secure connection between the first node and second node over a communication network;
prior to conducting a transaction between the first and second nodes, establishing trust or increasing the level of trust between the first and second nodes by
transferring initiating, in response to the interaction of a user of a computer node on the network, the transfer of a digital credential from the first node to the second node over the secure connection;
verifying the trustworthiness of the digital credential against at least one policy of the second node; and
upon a determination that the digital credential satisfies said at least one policy, conducting said transaction over the secure connection.
2. (canceled)
3. **(currently amended)** A method according to claim 1, wherein the digital credential is an attribute credential of an entity at the first node, said entity being a user or a system or a service.

Application No.: 10/077,851Docket No.: 30007317-2 US (1509-280)

4-5. (canceled)

6. (currently amended) A method according to claim 1, wherein the digital credential is an identity certificate of a user at the first node.

7-8. (canceled)

9. (currently amended) A method of exchanging a digital credential between a first computer node and a second computer node, the method comprising:

establishing a secure connection between the first node and second node over a communication network;

initiating, in response to the interaction of a user of a computer node on the network, the transfer of a digital credential from the first node to the second node over the secure connection;
and

A method according to claim 1, further comprising presenting to a user the digital credential associated with the secure connection.

10. (currently amended) A computer system comprising a first computer node coupled to a second computer node via a communication network, the first node and second node being arranged to allow a secure connection to be established between the first and second nodes, the first and second nodes having [[a]] processors responsive to the interaction of a user for initiating the transfer of a digital credential over the secure connection established between the first node and second node configured to perform the method of claim 1.

11. (currently amended) A computer system comprising a plurality of computer nodes coupled via a communication network, wherein a first node is arranged to allow a plurality of secure connections to be established between the first node and a plurality of other nodes coupled to

Application No.: 10/077,851

Docket No.: 30007317-2 US (1509-280)

~~the network, the first node being arranged to be responsive to the interaction of a user to initiate the transfer of a digital credential over the plurality of secure connections established between the first node and the respective other nodes according to claim 10, wherein the processors are further configured to perform the method of claim 23.~~

12. (canceled)

13. (currently amended) A computer system according to claim ~~[[11]]~~ 10, wherein the processors are further configured to perform the method of claim 20, and at least one of the first node and second node further comprises said graphical user interface ~~includes memory for storing the digital credential associated with the secure connection and a display for presenting to a user the digital credential.~~

14. (currently amended) A computer system according to claim 11, wherein ~~[[a]]~~ the second node further comprises
said graphical user interface; and
a controller for allowing the arranging digital credentials into groups, the groups being associated with a respective secure connection to allow a user to change statuses of the monitor digital credentials in real time associated with a secure connection.

15. (currently amended) A computer node for coupling to a second computer node via a communication network, the computer node being arranged to allow a secure connection to be established with the second computer node, the computer node comprising a processor responsive to the interaction of a user for
receiving initiating the transfer of a digital credential from the second node over a secure connection established between the first node and second nodes;
verifying the trustworthiness of the received digital credential against at least one policy;

Application No.: 10/077,851**Docket No.: 30007317-2 US (1509-280)**

and

upon a determination that the digital credential satisfies said at least one policy, conducting a transaction with said second node over the secure connection.

16-19. (canceled)

20. (new) A method according to claim 1, further comprising presenting, via a graphical user interface and in human-readable format, to a user at either or both of said first and second nodes the digital credential transferred over the secure connection.

21. (new) A method according to claim 20, wherein said presenting comprises displaying, by said graphical user interface, properties of said digital credential on a display, said properties comprising credential type, credential issuer, credential holder, and validity period.

22. (new) A method according to claim 1, further comprising presenting, via a graphical user interface and in human-readable format, to a user at said first node a list of credentials of said user; and allowing the user to select at least one of the credentials from said list as the digital credential to be transferred over the secure connection.

23. (new) A method according to claim 1, further comprising establishing a plurality of secure connections between the second node and a plurality of said first nodes over the communication network; presenting, via a graphical user interface and in human-readable format, to a user at said second node a list of digital credentials which have been transferred over the respective secure connections and verified to be trustworthy; and allowing the user to monitor and intervene on the credentials in real time.

Application No.: 10/077,851Docket No.: 30007317-2 US (1509-280)

24. (new) A method according to claim 23, wherein said presenting comprises displaying, by said graphical user interface, properties of at least one of said credentials of the list on a display, said properties comprising credential issuer, credential holder, and validity period.

25. (new) A method according to claim 1, wherein said transaction comprises providing, over the secure connection, access by the first node to a service provided by the second node;

said method further comprising

requesting, by the first node, another digital credential from the second node;

determining, by the second node, whether the first node is entitled to receive the requested digital credential, and, upon a positive determination, transmitting the requested digital credential from the second node to the first node over the secure connection.

26. (new) A method according to claim 25, wherein said requesting, determining and transmitting are performed as part of said establishing trust or increasing the level of trust between the first and second nodes and are followed by

examining, by the first node, the requested digital credential received from the second node prior to the transfer of the digital credential from the first node to the second node.

27. (new) A method according to claim 25, wherein said requesting, determining and transmitting are performed after said establishing trust or increasing the level of trust between the first and second nodes and are followed by

using, by the first node, the requested digital credential received from the second node to establish trust or increase the level of trust between the first node and a third node which is coupled to said first node via the communication network and over another established secure connection.

28. (new) A computer node according to claim 15, further comprising a credential

Application No.: 10/077,851**Docket No.: 30007317-2 US (1509-280)**

validation server module executable by the processor for executing a two-phase control on the digital credential, said two-phase control comprising:

a first phase in which said credential validation server module interacts with at least one external entity to check if the digital credential is still valid; and

a second phase in which said credential validation server module verifies the trustworthiness of the received digital credential against said at least one policy by checking on at least one of explicit constraints on the validation path, the issuer of the digital credential, and the context in which the digital credential has been issued.

29. (new) A computer node according to claim 28, further comprising an authorization server module executable by the processor for at least one of evaluating said at least one policy, modifying said at least one policy, and reloading the modified policy on the fly without service disruption.

30. (new) A computer node according to claim 29, further comprising a credential content management module executable by the processor for

abstracting the digital credential to be a collection of attributes independent of an original format of said digital credential, and

returning the abstracted digital credential to the credential validation server module.

31. (new) A computer node according to claim 30, further comprising a user context manager module executable by the processor for

receiving the abstracted digital credential from the credential validation server module, and

storing the abstracted digital credential in a user context area for an entire lifetime of said secure connection.

32. (new) A computer node according to claim 31, further comprising an object pool

Application No.: 10/077,851**Docket No.: 30007317-2 US (1509-280)**

manager module executable by the processor for dynamically managing the content of multiple said user context areas stored by the user context manager module, wherein

said managing comprises at least one of modifying, adding, removing, and disabling one or more digital credentials stored in the user context areas, and

said authorization server module accesses one or more of the user context areas and evaluates said at least one policy against the content of said one or more of the user context areas.